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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,006	01/14/2005	Olivier J Poncelet	84230JJH	4921

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EXAMINER

JOY, DAVID J

ART UNIT

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1794

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/522,006

Applicant(s)

PONCELET ET AL.

Examiner

David J. Joy

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-19 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 14 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 01/14/2005; 06/03/2008
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not

described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Independent Claim 1 is rejected because the specification, while being enabling for aluminum concentrations between 1.5×10^{-2} and 0.3 mol/l, does not reasonably enable aluminum concentrations less than 1.5×10^{-2} mol/l. The specification does not enable a skilled artisan to make the invention commensurate in scope with these claims. The specification provides examples of aluminum concentrations as low as 1.5×10^{-2} mol/l but lacks examples below this value.

5. Claims 2-19 are rejected accordingly, as they all depend upon Claim 1.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 1 is rejected as being indefinite. A claim is indefinite if undue experimentation is involved to determine the boundaries of protection. This rationale is applicable to a polymer "*obtainable*" by a stated process because any variation in any parameter within the scope of the claimed process would change the polymer produced. One who made or used a polymer made by a process other than the process recited in a claim would have to produce a polymer using all possible parameters within the scope of the claim, and then extensively analyze each product to determine if this polymer was obtainable by a process within the scope of the claimed process. See *Ex parte Tanksley*, 26 USPQ 2d. 1384 (Bd. Pat. App. & Int. 1991).

9. Additionally, Claim 1 is indefinite due to the recitation of the term "ambient" in Line 14 of the claim. The term "ambient" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and a skilled artisan would not be reasonably apprised of the scope of the invention claimed therein.

10. Claim 2 is indefinite due to the recitation that the alkali is "*selected from the group consisting a sodium, potassium, and lithium hydroxide, diethylamine, and triethylamine*". It is unclear, given the way that the claim is written (and punctuated), whether it is meant to recite sodium hydroxide, potassium hydroxide and lithium hydroxide, as well as

diethylamines and triethylamines of all three of the alkali metals, or only specific compounds of the three alkali metals. Appropriate correction is required.

11. Claims 2-19 (in addition to the rejection of Claim 2 above, for different reasons) are rejected accordingly, as they all depend upon Claim 1.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1-19 are rejected under 35 U.S.C. 102(e) as anticipated by the U.S. Patent of Liu et al. (6,548,149; hereinafter “Liu”).

14. Liu teaches an ink jet recording element that contains a support and at least one ink-receiving layer (see Abstract; see also Column 5, Lines 33-53; see also Column 6,

Lines 18-28). In addition, Liu teaches that the ink-receiving layer comprises a hydrosoluble binder (i.e., polyvinyl alcohol) and an aluminosilicate polymer that is dispersed in the binder matrix (see Column 5, Lines 33-53; see also Column 6, Lines 18-28; see also Column 9, Lines 44-60; see also Column 10, Lines 46-56). Specifically, Liu provides that the aluminosilicate polymer that is present in the ink-receiving layer is such that it has an Al/Si molar ratio between 1 and 4 (see Column 9, Lines 44-60). In combining the aluminosilicate polymer with the suitable binder, it follows that Liu also provides that a coating composition for the ink-receiving layer is thus obtained.

15. Claims 1-16 are viewed as product-by-process claims and hence the methods that the aluminosilicate is created by are not pertinent, unless applicant can show a different product is produced, despite that fact that Liu recites that the inclusion of the aluminosilicate in the ink-receiving layer results in an ink jet recording material that has a high gloss, produces high quality printed images and has a good dye keeping time. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is

unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Double Patenting

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

17. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory

double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

18. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. Claims 1-12, 14-16 and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-3 and 5-18 of copending Application No. 2006/0045833. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter dealing with the aluminosilicate polymer's production that is claimed in the instant application is fully disclosed in the copending application and would be covered by any patent granted on that copending application since the claims found in both the copending application and the instant application are claiming common subject matter, as follows: a polymer obtainable by a method for preparing aluminosilicate polymer comprising steps for treating a mixed aluminum and silicon alkoxide comprising only hydrolyzable functions in the presence of silanol, stirring the mixture in the presence of

silanol groups until a polymer is formed, and eliminating the byproducts from the reaction medium. Since the scope of the instant claims and the scope of the claims in the copending application are overlapping, the claimed subject matter of the instant claims is not patentably distinct over the claims of the copending application.

20. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

21. Claims 1-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-17 of copending Application No. 2007/0104900. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter that is claimed in the instant application dealing with an ink jet recording material containing an aluminosilicate polymer that is produced according to a particular method is fully disclosed in the copending application. The sole difference between the claims of the instant application and those of the copending application has to do with the molar ratio of a chelating agent that optionally added to the invention of the instant application. However, such a variation is clearly a parameter that a skilled artisan could alter in order to obtain the optimal performance from the ink jet recording

material that exhibits the following properties: high quality printed images, rapid drying after printing, good dye keeping in time, smooth appearance, and high gloss.

22. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

23. Claims 1-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-10 and 16-25 of copending Application No. 2005/0253916. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter that is claimed in the instant application pertaining to an ink jet recording material containing an aluminosilicate polymer that is produced according to a particular method is fully disclosed in the copending application. While the claims of the copending application recite all of the same limitations as those of the instant application, the copending claims also recite the addition of non-hydrolyzable functional groups of silicon compounds. However, given the broad recitation and open-ended language of the instant claims, it would have been obvious to a skilled artisan to be able to modify a hybrid polymeric solution and make a polymer having only hydrolysable functional groups. Further, the copending application also recites

that the relative ratio of the hydrolyzable functional groups and the non-hydrolyzable functional groups can be so low (i.e., as low as 0.1), that the hybrid polymer would practically match the polymer having only hydrolyzable groups in its overall composition. Likewise, such a variation is clearly a parameter that a skilled artisan could vary in order to obtain the optimal performance from the ink jet recording material that exhibits the following properties: high quality printed images, rapid drying after printing, good dye keeping in time, smooth appearance, and high gloss.

24. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

25. Claims 1-12, 14-16 and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-11 and 17-23 of copending Application No. 2005/0238559. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter dealing with the aluminosilicate polymer's production that is claimed in the instant application is fully disclosed in the copending application and would be covered by any patent granted on that copending application since the claims found in both the copending application and the instant application are claiming common

subject matter, as follows: a polymer obtainable by a method for preparing aluminosilicate polymer comprising steps for treating a mixed aluminum and silicon precursor resulting from the hydrolysis of a mixture of aluminum compounds and silicon compounds only having hydrolyzable substituents in the presence of silanol, stirring the mixture in the presence of silanol groups until a polymer is formed, and eliminating the byproducts from the reaction medium. Since the scope of the instant claims and the scope of the claims in the copending application are overlapping, the claimed subject matter of the instant claims is not patentably distinct over the claims of the copending application. While the claims of the copending application recite all of the same limitations as those of the instant application, the copending claims also recite the addition of non-hydrolyzable functional groups of silicon compounds. However, given the broad recitation and open-ended language of the instant claims, it would have been obvious to a skilled artisan to be able to modify a hybrid polymeric solution and make a polymer having only hydrolysable functional groups. Further, the copending application also recites that the relative ratio of the hydrolyzable functional groups and the non-hydrolyzable functional groups can be so low (i.e., as low as 0.1), that the hybrid polymer would practically match the polymer having only hydrolyzable groups in its overall composition.

26. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

27. As for the citations to the teachings contained in the specifications of the copending applications cited to hereinabove, Applicant's attention is drawn to MPEP 804 where it is disclosed that "the specification can always be used as a dictionary to learn the meaning of a term in a patent claim." *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968). Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent (underlining added by examiner for emphasis). *In re Vogel*, 422 F.2d 438, 164 USPQ 619, 622 (CCPA 1970). Consistent with the above underlined portion of the MPEP citation, the aforementioned references to the specifications of the instant applications are proper.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 2002/0085972	07/2002	Poncelet
US 6,254,845	07/2001	Ohashi et al.
US 5,888,711	03/1999	Poncelet et al.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Joy whose telephone number is (571)272-9056.

The examiner can normally be reached on Monday - Friday, 7:00 AM - 3:30 PM EST.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie E. Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DJJ/

Examiner, Art Unit 1794

06/06/2008

/Milton I. Cano/

Supervisory Patent Examiner, Art Unit 1794